

Title (en)

STACK FOR A SOLID OXIDE FUEL CELL USING A FLAT TUBULAR STRUCTURE

Title (de)

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Title (fr)

BLOC POUR UNE PILE À COMBUSTIBLE À OXYDE SOLIDE UTILISANT UNE STRUCTURE TUBULAIRE PLATE

Publication

EP 2424028 A4 20130724 (EN)

Application

EP 10767233 A 20100415

Priority

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Abstract (en)

[origin: EP2424028A2] The present invention relates to a solid oxide fuel cell stack capable of producing electricity, in which unit cell modules are connected in series and in parallel, and to a manufacturing method thereof. The solid oxide fuel cell stack is manufactured by: making a unit cell module comprising at least one unit cell formed on the outer surfaces of a flat tubular support, a first electrical interconnector formed on the front end of the support and at least a portion of the outer surfaces so as to be connected to a first electrode of the unit cell, and a second electrical interconnector formed on the rear end of the support and at least a portion of the outer surfaces so as to be connected to a second electrode of the unit cell; and stacking the unit cell modules such that the electrical interconnectors come into contact with each other.

IPC 8 full level

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Citation (search report)

- [XY] WO 0229917 A1 20020411 - ROLLS ROYCE PLC [GB], et al
- [XY] US 2007105012 A1 20070510 - DEVOE ALAN [US], et al
- [X] EP 1603183 A1 20051207 - TOKYO GAS CO LTD [JP]
- [X] WO 0124300 A1 20010405 - CERAMIC FUEL CELLS LTD [AU], et al
- [XP] WO 2009123389 A1 20091008 - POSTECH ACAD IND FOUND [KR], et al
- See references of WO 2010123219A2

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